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# EU at loggerheads over €1bn for R&D

MEPs push national governments to boost 2022 Horizon Europe budget

Robin Bisson

**EU political institutions are locked in a fight** over a billion euros of funding for the bloc's Horizon Europe R&D programme, with neither side seeming ready to compromise.

MEPs voted on 20 October to channel €12.5 billion to researchers next year via Horizon Europe. But a representative of national governments—under the auspices of the Council of the EU—reiterated member states' insistence that the programme should get just €11.9bn.

The stakes are also raised due to a further €408.7 million that remains unspent from the EU's previous R&D programme. The European Parliament has said this should be reallocated to Horizon Europe, a move that member states strongly oppose.

"Parliament's proposal to increase the allocation foreseen by the Council...goes against the attempt to make a stable evolution for the future," said Irena Drmaž, representing the Slovenian presidency of the Council at a Parliament debate on the budget.

The Council is arguing that the EU should limit its research funding from its main budget until the second half of the overarching 2021-27 budget period, when extra money from the bloc's Covid-19 recovery fund runs dry.

But MEP Christian Ehler, the

🗣️ Irena Drmaž (left), representing the Slovenian presidency of the Council of the EU, has opposed a move to allocate €408.7 million in unspent funds to the EU's latest R&D programme, while MEP Christian Ehler (right) said not doing so would be a retroactive cut in research funding



IMAGES: EUROPEAN UNION

coordinator on Horizon Europe for the Parliament's research committee, said not reallocating the unspent €408.7m would "effectively cut research funding retroactively".

He added: "Cutting research funding at this time would be irresponsible and unacceptable."

The research community reacted positively to the Parliament's stance, the adoption of which kicked off three weeks of negotiations with the Council.

Thomas Estermann, director for governance, funding and public policy development at the European University Association, said the funding was a small figure but "could go a very long way".

Research advocates hope the logic of long-term investment in research and innovation has also been demonstrated during the pandemic through the rapid

**"Cutting research funding at this time would be irresponsible and unacceptable."**

**Christian Ehler**, MEP and coordinator on Horizon Europe for the Parliament's research committee

development of Covid vaccines.

"We know that the road to negotiations is still long, but on the road to recovery Europe will have to embrace innovation, research and education as cornerstones," said Stefan Constantinescu, president of the Federation of European Academies of Medicine.

Everything now hinges on discussions with the Council and

the coming "conciliation" talks.

Mattias Björnmalm, senior adviser for research and innovation at the Cesaer group of European science and technology-focused universities, said it "would be dramatically counterproductive to cut funding now, as it would pull the rug away from under our researchers" who are contributing to key EU agendas around digitisation and sustainability.

Other commentators are also frustrated with the position of national governments on budget negotiations. But Kurt Deketelaere, secretary-general of the League of European Research Universities, said the research world was familiar with this political dance by now: "This is the traditional annual battle... The only one who can surprise us now is the Council." 🗳️

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Climate emergency

COP26 risks forgetting the scientists—and the science

Inga Vesper, correspondents editor

Glasgow, the Scottish city that will play host to COP26 in a few days' time, in many respects does not feel like a city gearing up for a climate-change summit.

Local businesses complain that their customers' emissions are increasing as they sit in traffic and are forced to drive huge diversions, thanks to road closures around the Scottish Event Campus, the giant venue on the banks of the river Clyde where COP26 will be held. The University of Glasgow is among the organisations affected: many of the cycling lanes used for student and staff transport have been shut down. One academic working there told Research Professional News that many of his colleagues had abandoned cycling altogether in favour of using cars.

Glasgow council's failure to facilitate green travel in the city at the time of the event, instead prioritising swift access for VIPs, is symptomatic of much bigger questions.

Who is COP26 for, and what will it really achieve? And where do researchers and their work fit in with the high-level political chess game being played?

The annual summit has become one of the largest de facto science conferences in the world—around 30,000 people are expected to attend this year's event with the ostensible aim of thrashing out an urgently needed global plan to curb emissions.

But COP summits have come under increasing scrutiny from climate researchers and the public alike.

There is huge scepticism over the will and pace of efforts to limit warming to

1.5C, the level agreed at COP21 in Paris back in 2015. Despite that agreement, in material terms COP still has little to show for its efforts, even after 26 years of existence.

The gathering does at least turn a political spotlight on climate issues, which should create a powerful platform for climate scientists.

But here once again, COP26 is problematic for researchers, as many are struggling to access the conference's events. Registration confirmation has been sluggish, and there is concern among visiting scientists that they may not be able to book travel in time.

With the summit apparently so difficult to access, researchers, especially the ones living and working next door, are right to feel frustrated. But they should take some heart from the fact that their warnings are being heard, even if they have not yet been properly acted on by the world leaders whose decisions are so critical.

As forests burn, cities flood and heatwaves ravage the planet, politicians increasingly look like they are falling very short of the actions needed to tackle climate change. But academics in the field are winning the battle of public opinion. More and more, people are getting angry, and not just about road closures.

The decision-makers gathering at the latest COP must not forget researchers or their research, nor ignore the rise in public awareness of the need for action.

Time is running out. And not just to get through the traffic in time for the opening speeches. ☹

Follow COP26 coverage online throughout the event



“More and more, people are getting angry, and not just about road closures.”

\* Contact us



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# BRIEFING WHAT’S GOING ON



\* The European Space Agency sent this ‘service module’ by jet plane to the Kennedy Space Center in the United States this month. There, it will be connected with another piece of hardware to form the Orion spacecraft, which is destined to take astronauts around the moon on the Artemis II mission.

### Open access

An increasingly common model of academic publishing—‘gold’ open access—is **furthering inequalities in academia and empowering large commercial publishers** to the detriment of research, European academy leaders have warned. Partly in response to requirements from funders, such as the Plan S open-access initiative, many publishers are adopting gold models in which they publish papers with open access. But in a statement linked to International Open Access Week this month, the European Federation of Academies of Sciences and Humanities (Allea) warned that publisher promises to make research more open ring “hollow...if, at the same time as the library door is opened, inequitable structures within academic research get reinforced”.

Full story

### Covid recovery requests

**Bulgaria has requested €6.6 billion in grants from the EU’s Covid-recovery fund**, with some of the money earmarked for improving research and innovation in the country. On 15 October, the European Commission announced that it had received a proposal from the Bulgarian government that sets aside money for decarbonisation, research and innovation, and healthcare. To date, the Commission has approved 22 plans, with just the Swedish, Polish and Hungarian—and now the Bulgarian—proposals awaiting sign-off. One laggard member state is the Netherlands, which has yet to submit a plan.

Full story

### Covid recovery approval

The European Commission has released more than **€820 million in Covid recovery funding for Slovakia**, for spending on projects including an overhaul of its research systems. Under the rules of the EU’s vast Recovery and Resilience Facility, countries are able to receive an initial 13 per cent of their total allocation as ‘pre-financing’ when plans for spending their shares are approved. In Slovakia’s case this amounts to €822.7m, which the Commission paid on 13 October. All countries are expected to spend large amounts of their allocated cash on making their economies greener and speeding up their digital transitions; in often-related spending, many of the plans also channel significant sums to research and education.

Full story

### Horizon Europe

Researchers in Israel will gain access to the EU’s major research and innovation funding programme after the country agreed to a deal to join Horizon Europe as an associate member. The agreement means **researchers in Israel will be able to collaborate on EU-funded projects** and access grants from the €95.5 billion of funding promised through Horizon Europe over the next seven years. Association to the programme enables the fullest possible participation for non-EU countries. Other countries to have formalised deals to join Horizon Europe as associate members this month include Ukraine, Tunisia and the Faroe Islands.

Full story

### Polish problems

**Relations between the EU and the Polish government have deteriorated** following a row that was trigged by a Polish court ruling earlier this month stating that the country’s constitution had primacy over EU law in certain areas. Covid-recovery cash from central EU funds—much of which is earmarked for research spending—is already being held up by the spat, and more EU money for Poland is potentially at risk if things worsen. Giving a speech at the European Parliament plenary on 19 October, European Commission president Ursula von der Leyen did not appear to be willing to back down, stressing the core values of “freedom, democracy, equality and respect for human rights” that were agreed by EU countries upon joining the bloc.

Full story

### Arctic research

The EU has overhauled its Arctic policy and put an emphasis on sustainability, supported by research, innovation and scientific diplomacy with Arctic nations. Announcing a refreshed policy on 13 October, environment commissioner Virginijus Sinkevičius said that the melting of ice and thawing of permafrost in the Arctic further accelerated climate change with “huge knock-on effects”. **The EU has committed to intensifying its research into permafrost thawing**, calling for further research on the development of adaptation and mitigation measures, as well as increasing knowledge of the impact on communities.

Full story



### Clinical trials

To comply with EU guidelines, **sponsors of clinical trials must report results on an EU register within a year of a trial’s completion**, to prevent selective reporting from distorting research, as well as to improve the transparency of a vital area of science. But compliance has frequently been shown to be patchy, especially at universities. Now things may be improving. In a report published on 6 October, Transparimed and other groups say some of Europe’s biggest research institutions are now uploading trial results as required.

Full story

### Missions maven

Universities should be bringing together everyone from physicists to poets, creating **cross-disciplinary spaces “where serendipity should happen”**, according to the economist Mariana Mazzucato, who has been instrumental in the rise of ‘mission-driven’ thinking in research funding. Speaking at a conference on 13 October, she said developing solutions to major challenges required researchers to break out of sectoral silos. “Bringing together economist, physicists, poets, anthropologists is absolutely central if we care about tackling issues around biodiversity or issues around inequality, and we need more spaces like that,” she said.

Full story

### Going green

The chief scientific advisers to the European Commission have said that **major investment is needed to expand low-carbon energy**

### Quote of the week

“Science has been telling us for years that we must accelerate the transition towards a carbon-neutral economy. Now, the economy is adding another reason to do so.”

Commission president **Ursula von der Leyen** joins the chorus calling for climate action at the upcoming COP meeting in Glasgow, Scotland

**technologies**, in response to the spike in energy prices across Europe in recent weeks. The surge in energy costs has been driven by a global increase in demand for gas, leading to wholesale energy prices hitting an all-time high. In a statement on 20 October, the Commission’s seven chief scientific advisers said accelerating the transition towards a low-carbon system could reduce prices over the long term.

Full story

### SKA telescope

**South Africa has formalised its hosting agreement for the Square Kilometre Array**, which opens the way for construction work to begin on the project to install giant telescopes in the country. The agreement was signed on 14 October between the SKA Observatory, South Africa and Australia. Nations including France, Germany and the Netherlands are also taking part in the huge infrastructure scheme.

Full story

### Cesaer presidency

**Ghent University rector Rik Van de Walle has been re-elected as president of Cesaer**, the association for science and technology-focused universities in Europe. The group counts more than 50 institutions as members, ranging from Aalborg University in Denmark to Warsaw University of Technology in Poland. At its 35th General Assembly on 15 October, the association’s members voted to extend Van de Walle’s leadership by another two years covering 2022-23.

Full story

### Book translation

Researchers writing books in Chinese, Japanese or German can now have their **work translated into English with the help of an artificial intelligence tool**, if they are publishing with Springer Nature. The company will also offer AI book translation for Spanish, Portuguese and French, it announced on 18 October. While the traditional research dominance of the western world is increasingly being challenged, English remains a vital language for international scholarly communication. Translation is often a major barrier—and a significant cost—for those who do not speak and write English.

Full story

### Erasmus+

The EU’s academic exchange programme, Erasmus+, will undergo a makeover to ensure greater access for a more diverse range of candidates, the European Commission has announced. **For the 2021-27 funding period, a series of measures will make the long-standing programme more inclusive**, including dedicated financial support for people from underprivileged backgrounds to help cover their expenses. Participants will also have access to tailored support services throughout the programme, including linguistic help, preparatory visits and increased mentorship programmes. Going forward, the selection process will prioritise “quality projects involving participants with fewer opportunities”, according to a statement from the Commission.

Full story

# Science ‘central to Commission strategy’

Work programme for 2022 announced, but lack of detail on research gets a lukewarm response

Rachael Pells

The European Commission has given major billing to university reform and the strengthening of science in its plan for the coming year, but a lack of detail on the role of research in its strategy has left some policy advisers disappointed.

“The response to the pandemic has once again proven that science and education are not only invaluable for promoting our way of life, but also for preserving our health,” the Commission’s work programme for 2022 states. “We want to secure the future of the next generation of European scientists and scholars, and maintain the leading global status of European universities while boosting their cooperative work.”

Released on 19 October, the programme contains 42 new initiatives aligned with ambitions set out by the Commission’s president, Ursula von der Leyen, in her recent State of the Union address. Of these, 10 relate directly to education, research and innovation, but research itself only receives a brief mention.

Kurt Deketelaere, secretary

general of the League of European Research Universities, said the minimal references to research were “very poor indeed”. But he suggested that, given the challenges of the previous year, there was likely a backlog of unrealised strategy targets to get through that meant those in the Commission’s research unit would “not be short of work”.

A revision of the EU’s exemption guidelines for R&D funding for companies is referenced in the work programme—something that Joep Roet, a policy adviser for the Netherlands House for Education and Research, said was “welcome” but indicative that 2022 would not be a “research-intensive year”.

The revision “aims to ensure that companies have clear guidance on what horizontal cooperation agreements they can conclude without risk of infringing competition law”.

There is also a strong focus on universities, with the Commission saying that removing barriers to collaboration in higher education will be at the centre of Europe’s pandemic recovery (see below).

The proposals outlined in



the work programme for 2022 largely match up with the EU’s commitments to accelerating the transition to both a green and digital economy, in line with the Paris Agreement and UN Agenda for 2030. But this year’s programme is also written in the context of Covid-19, and includes a pledge to “bounce forward” by rebuilding economies damaged by the global crisis.

It adds that: “Research and innovation will play a key role in responding to the challenges...It is important to ensure that Europe remains at the frontier of science and at the forefront of new waves of innovation.”

There are several additional

actions in the strategy paper that will likely affect research and innovation on a European scale indirectly. These include a new framework for a “dynamic EU pharmaceutical sector, to ensure access to affordable high-quality medicines for all EU citizens, foster innovation and enhance security of supply”.

A revision of existing legislation for medicines prescribed to children and for rare diseases will take place, which could open up avenues of research in these areas. Revisions to the EU Chips Act, a defence technology roadmap, and a proposal to build a secure communications system in space are also promised. ☛

## Universities made a key plank of post-Covid fightback

Commission’s 2022 plan of action puts focus on removing national barriers to institutional collaboration

Rachael Pells

Removing barriers to collaboration in higher education will be key to Europe’s Covid-19 recovery, the European Commission has said.

In its programme of activities for the coming year, the Commission said it wanted to “maintain the leading global status of European universities while boosting their cooperative work”.

The programme contains 42 new initiatives (see above), two of which fall under the Commission’s “education package”, including a non-legislative European strategy for universities, and a programme specifically focused on “building bridges for effective European higher education cooperation”.

A need for digital skills training across the education sector was also emphasised in the paper, published on 19 October.

On its European universities strategy, the Commission promised to present “ways for deeper and sustainable transnational cooperation in higher education”, suggesting an easing of administrative barriers to working across countries.

Research advocates have previously expressed concern that the suggested strategy might have little impact on major barriers to cross-border cooperation

between institutions. Exactly how the Commission plans to deliver on its aims remains opaque to many in the sector.

Kurt Deketelaere, secretary general of the League of European Research Universities, said the Commission could overcome national obstacles to cross-border collaboration, but seems shy of the action needed. He said member states should “be obliged to eliminate obstacles”. ☛

# UK bodies blocked from Horizon funds

Delays to UK’s association to EU’s R&D programme are already affecting 69 partners on projects

Robin Bisson

Dozens of UK organisations have taken part in projects funded through the EU’s Horizon Europe R&D programme during 2021 without being able to access the funding.

The €95.5 billion programme launched on 1 January, but no non-EU countries were formally associated to it until Iceland and Norway joined on 24 September, followed by Ukraine on 12 October and Turkey on 27 October. In recent weeks, other candidate countries have successfully concluded talks with the European Commission to join and now await final sign off. But while the UK reached an agreement in December 2020, political disputes continue to delay the country’s actual association.

Researchers in countries that are candidates for association were encouraged to apply for Horizon Europe funding, but they cannot sign grant agreements or receive funding. And while the bulk of calls that have already closed have not yet reached the grant-agreement stage, organisations participating in

active projects funded through the European Institute of Innovation and Technology (EIT) have found themselves blocked from receiving funds.

The EIT supports collaborative projects, with funding channelled through its thematic knowledge and innovation communities. A spokesperson said that, “in total, 69 UK entities are participating in implementing activities by the EIT KICs in 2021”, adding that the ineligibility for EIT funding of organisations from countries not yet associated to Horizon Europe “has been communicated to EIT KICs and through them to their partners throughout the process”.

“An amendment to the grant agreement could be possible when the association agreements enter into force to change the status of the entities and the available budget,” the spokesperson said, “depending, however, on the provisions of the association agreements concerned.”

But UK organisations taking part in EIT projects—which include companies, universities and public sector organisations—are concerned that if association is not agreed by the end of the year,



they may lose the funding they would have received for 2021.

Colin Collino is the founder and director of the engineering company Gravity Mining, which is taking part in a project funded by EIT Raw Materials on extracting valuable metals from aluminium mine tailings. “We’re effectively looking at a bad debt of about €100,000 this year, so it’s not insignificant,” he said. Collino added that “our research partners that we get on with very well are a bit embarrassed”.

In March, the lead partner on the project, the Slovenian National Building and Civil Engineering Institute, told Collino that if association was not agreed until 2022, his 2021 funds could be lost.

At the time this article was published, neither the EIT nor the European Commission could clarify how many organisations across Europe had been affected, nor whether they would be able to recoup any losses. ☛

## Switzerland puts up €370m for Horizon Europe projects

Country subsidises researchers’ EU work amid ongoing block on full participation in scheme

Daniel Cressey

Switzerland is putting up 400 million Swiss francs so that its researchers can take part in the EU’s Horizon Europe programme while they remain locked out of full access to the R&D scheme and its funding.

Switzerland was previously an ‘associate country’ to the EU’s huge research programmes, but it is currently excluded from

full membership as a result of a stalemate between Swiss leaders and the European Commission, which recently rejected the possibility that negotiations could reopen for the country to associate to Horizon Europe.

This means Switzerland is deemed a non-associated “third country”; while its researchers can participate in roughly two-thirds of the programme, they cannot receive EU funding.

In an announcement on 20 October, the Swiss Federal Council confirmed it would begin financing individual participants directly, in place of Horizon Europe grants, meaning that Swiss researchers can take part in projects without having to plug the gap in funding themselves.

The council said it hoped that subsidising researchers to take part in Horizon Europe as a third country would help to “strengthen

Switzerland’s long-term standing as a location for research and innovation”.

Funding of around SFr400m (€374m) will be made available for project participants in Switzerland this year.

The government also reiterated that it was looking into “possible complementary and replacement measures” to subsidise researchers in place of Horizon Europe membership. ☛



FOCUS FROM OUR CORRESPONDENTS

Climate of concern

How countries around Europe measure up on commitments to tackle climate change ahead of COP26

Research Europe correspondents

World leaders are getting ready to descend upon Glasgow, Scotland, which is hosting the UN's COP26 climate change conference this week. At the summit on the banks of the River Clyde (pictured), they will try to set out ambitious pledges to reach net zero emissions of greenhouse gases by 2050.

But across Europe, there are significant differences between countries when it comes to funding the research behind their promises. Our correspondents have assessed the mood in their own nations before the world's most important climate conference takes place.



Hristio Boytchev  
in Berlin

People in Germany are seriously concerned about climate change—so much so that the Greens won 15 per cent of all votes in September's national election, garnering 51 extra seats in parliament for a total of 118.

After catastrophic floods in July that left more than 180 people dead, many Germans asked how such a disastrous event could have happened when the country was home to some of the top climate scientists and meteorologists in the world. Criticism was voiced over outdated warning mechanisms that led to inefficient evacuations.

"As a lesson from this severe weather disaster, research on such extreme weather events must be further expanded in the coming years," said research minister Anja Karliczek at the time.

Karliczek was not afraid to blame global warming for the floods. She stressed the importance of research that could lead to more accurate forecasting of extreme weather events. "Independently of this, we need to stop climate change," she added.

With this background, Germany is expected to be a strong advocate for climate action at COP26. But it has to be noted that, despite the government's commitment to using research



IMAGE: LEO HARRISON FOR RESEARCH PROFESSIONAL NEWS

and innovation to prevent emissions and remove carbon dioxide from the atmosphere, no increase in funding for such research has been mentioned so far.

Now that the Greens are likely to be part of a governing coalition, this may change. In preliminary talks between the Greens and their most likely coalition partners, climate was number 2 out of 10 topics discussed.

"Man-made climate change is one of the greatest challenges of our time," a summary of the talks said. "This also presents great opportunities for our country: new business models and technologies can create climate-neutral prosperity and good jobs."

By highlighting that global warming affects all areas of business and society, Germany could be establishing a template for climate research coordination that other COP26 nations may follow.



Jason Walsh  
in Paris

French presidents like to make their mark on the country. François Mitterrand's Louvre Pyramid would be unimaginable elsewhere: other capitals have more plateglass



"Pushing climate research away from fundamental work and towards big, industry-heavy projects will cause discontent."

Jason Walsh in Paris

buildings than Paris, but few have the audacity to put them in the middle of a national monument.

In a similar spirit, Emmanuel Macron's presidency has been defined by putting a shiny Silicon Valley veneer on cutting-edge research spending. His France 2030 plan, launched just two weeks before COP26, promises big, visionary, expensive projects. Under the plan, France will develop hydrogen technology and modular nuclear reactors—all in lockstep with the country's biggest enterprises.

Macron knows that nuclear plants are generally supported by the French public but that smaller, green measures can be unpopular. The France 2030 plan therefore focuses on big, state-wide research projects. The real threat to the success of the plan, though, is not public dissent but France's own constant policy changes.

Indeed, researchers may be the most vocal opponents of the plan. Earlier this year, French research minister Frédérique Vidal imposed wide-ranging reforms on research administration. These reforms—known by the acronym LPPR—revealed deep fears among academics that science in France was increasingly being left to the mercies of the market.

Research unions and academics still complain of the 'strings attached' nature of French public research funding and warn of creeping privatisation. A further drive to push climate research away from fundamental work and towards big, industry-heavy projects—as proposed in the France 2030 plan—will cause more discontent.

Many researchers already feel that French science is in decline. The country's Covid-19 vaccine development was marred by delays, France suffers from academic brain drain and research institutions outside Paris complain of being marginalised. When it comes to climate science, the France 2030 plan will certainly provide a boost—but not to the battle-weary academics who may be needing it the most.



Anthea Lacchia  
in Wicklow

The Irish Environmental Protection Agency's latest funding announcement includes €10.5 million for climate research. The declaration follows national funder Science Foundation Ireland's commitment to climate-related work in its research centres and challenge-based programmes.

This month, the Irish budget for 2022 set aside €11m for climate research, including work on decarbonisation and sustainability. Furthermore, the Irish Climate Research Coordination Group, a body set up by the EPA in 2014 to coordinate climate research in Ireland, provided 84 research awards with a total budget commitment of €21m in 2020.

But with much of this work taking place in disparate research groups and institutions, some academics are worried about repetition and a general failure to turn the funding into tangible change on the ground. Ireland remains far from meeting its target to reduce carbon emissions by 30 per cent from 2005 levels by 2030.

In 2017, a government spending review in Ireland raised "concerns over the level of coordination and possible duplication of work that may currently exist in the climate research sector". These concerns were shared by the All-Island Climate and Biodiversity Research Network, an initiative by Irish researchers studying climate and biodiversity topics to better coordinate their work.

The network is seeking €10m a year for at least 10 years to "develop a large-scale research and innovation initiative" to address the current challenges. The group wrote in a report that "most of the building blocks" for this already existed in Irish academia. But efforts remain dispersed, leading to "redundancy of effort and underexploitation" of expertise.

Ireland's consistent failure to bring down emissions is partly due to this issue. Without

a concerted effort, the impact of the country's climate science will remain as piecemeal as the science itself.



Fabio Turone  
in Milan

Complex issues such as climate change need multidisciplinary approaches that do not blend easily with the classic power structures of academic research based on scientific disciplines. In this respect, Italy struggles as much as any other country. The reality of Italian climate science is one of small research groups dealing with specific questions, in line with their disciplines.

But there are additional hurdles. Research on climate change in Italy suffers from chronic underfunding, a lack of planning, lack of priorities and an abundance of red tape—all issues that also plague the wider academic landscape. This is despite two big efforts to funnel money quickly and simply to researchers, namely the National Research Programme and the National Recovery and Resilience Plan, part of an EU effort to boost national economies after Covid-19. But there appears to be no real synergy between these two big plans.

Some reasons for hope came this year with the establishment of Italy's first national doctorate in sustainable development and climate change. The programme, taught in English, will start in November and train 105 PhD students, who will be affiliated with one of the 30 Italian public and private universities participating in the project.

But the organisers of the programme were caught off-guard in August when the government announced a similar call for PhD researchers, funded by the React-EU grant scheme. The rush to get applications submitted to both programmes may have resulted in 'greenwashing'—the act of simply adding climate-related keywords to an ordinary research proposal.

Focus From our correspondents

“Among the Nordic countries, there is an unofficial race to become the most successful adaptor to climate change.”

Staffan Dahllöf in Copenhagen

What Italy truly needs is a national institute that coordinates research on climate, or even just a few university departments large enough to set a nationwide agenda. But in the absence of this, climate research in Italy will continue in much the same way—well intentioned and sincere, but held back by problems that go beyond its remit.



Erik te Roller in Haarlem

In recent years, the Dutch government has consistently increased funding for public-private climate-related R&D. But the country has no overarching plan to deploy such R&D to achieve its climate goals for 2030 and 2050—reducing carbon emissions by 49 and 95 per cent, respectively, compared with 1990 levels.

According to the Rathenau Institute, an organisation that facilitates public debate on science, the Dutch government spent about €676 million on climate R&D in 2017. The amount of private R&D spending is growing, but funding for climate-related research at universities has stagnated in recent years.

Instead, the Dutch government has put its efforts into grants for public-private collaborative climate projects in the field of renewable energy and demonstration, where funding has steadily increased to some €250m a year.

Now, the country's climate researchers are at a turning point thanks to the arrival of the €20 billion National Growth Fund. The Dutch government decided in April to allocate €73m through this fund to the

Groenvermogen programme for R&D and small demonstration projects in hydrogen technology. If the programme goes well, much more money will follow. In line with this, the government will decide next year about a proposal to finance the upscaling of hydrogen technology.

But all these fragmented activities will have to be brought together to make a real impact. In this regard, the AWTI, a government advisory body on science, technology and innovation, has urged the Dutch government to draw up a clear future-oriented action plan on the transition to an environmentally sustainable economy in the Netherlands. A united vision, it said, would help politicians determine what kind of R&D and corresponding funding would be needed.

In the absence of such a vision, it remains impossible to say how much of the National Growth Fund's extra spending should be earmarked for academic research. Nor has it been determined whether these investments will put the Netherlands on the path to becoming a climate-neutral economy by 2050.

As COP26 approaches, Dutch climate research remains far too fragmented.



Staffan Dahllöf in Copenhagen

**‘More research is needed!’** The classic conclusion of countless think tank and university association reports fits well for climate change. After all, most fields of academic study are relevant to climate, and global warming will cause an indefinite number of problems for society.

Among the Nordic countries, there is an unofficial race to become the most successful adaptor to climate change. Sweden and Denmark claim to be in the lead, with Denmark being the pioneer country in wind power, while Sweden has reduced carbon emissions through hydro and nuclear power. Finland makes the case that it is rapidly catching up, whereas Norway—not an EU member—bets on green energy at home but remains a big supplier of oil and natural gas abroad.

When the three Nordic EU countries submitted national spending plans to the EU's Recovery and Resilience Facility, they had all already overshot the EU's goal of devoting 37 per cent of spending under the programme to climate change. This is because R&D spending in these countries has increasingly been geared towards the issue. In fact, in Denmark and Sweden, you would be hard-pressed to find any public-private R&D measure—EU-supported or not—that does not somehow refer to the climate.

But how much of this is actually new funding and how much is greenwashing? And there is another question to be asked: what defines a ‘green investment’?

The answer remains anyone's guess. And therein lies the fundamental problem faced by researchers in the Nordic countries: if everything is climate research, how can support for—and success in—this field be accurately measured?

To ensure that concrete action does not get lost among myriad relabelled funds, the Nordic countries need a serious review of how they define ‘green’ R&D and support for climate science. In that respect, the think tanks are right: more research is needed. 🧐

FOCUS AWARDS

All eyes on the prize?

How equality among Nobel Prize winners could improve in the coming years

Fiona McIntyre

This year, another set of Nobel Prizes were awarded to men for outstanding achievements in their fields. Women did not win a single prize in physics, chemistry, medicine or economics.

The gender chasm when it comes to these prestigious prizes has once again attracted significant criticism, with the Association for Women in Science warning that it is “deeply concerned about the lack of diversity” among the winners.

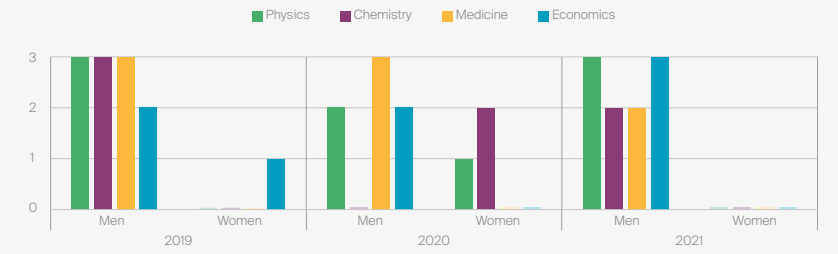
“This feels like a giant step backward following last year's Nobel Prizes when three women were recognised,” says AWIS chief executive Sandy Robert.

With three prizes for women being something to celebrate, achieving gender parity in the Nobels feels a long way off. In the past three years, women have won four prizes in physics, chemistry, medicine or economics, while men have taken 28.

Omitting women from those categories this year has led to calls for the Nobel Prize selection committees and assemblies to be more transparent and show how they reach their decisions. Prizes are often awarded many years after the initial work was carried out, which the AWIS says “continues to put women and minorities at a disadvantage”, as these scientists have traditionally not been given the same opportunities and are less likely to have built up a significant body of work. According to online statistics database Statista, between the Nobel Prize's inauguration in 1901 and 2021, women have taken 58 awards—including in literature—while men have won 876. But gender is not the only respect in which the Nobel prize has raised eyebrows. Between 2019 and 2021, researchers at US institutions took home 20 prizes, while those at European organisations were awarded nine. Just two prizes were won by researchers based at institutions in other parts of the world. This is not reflective of the way the research world has changed in recent years. A report published in June revealed that the US now vies for the top spot with China when it comes

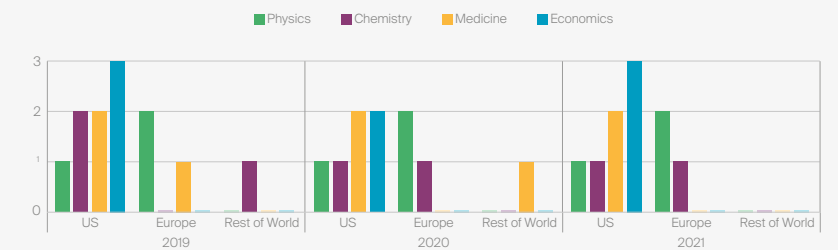
Nobel Prize winners by gender

The number of men and women who have been awarded Nobel Prizes in physics, chemistry, medicine or economics.



Nobel Prize winners by location

The area of the world where the winner's institution is based.



to the number of research papers published, while a separate report last month showed that there had been a surge in the number of research publications in Latin America.

In years to come, these changes are likely to filter through to the Nobel Prize. The Citation Laureates, an exercise run by Clarivate\* that tracks researchers' influence using their citation record, gave 10 prizes to researchers based in the US in its 2021 awards. It gave just one to a researcher in Europe—and five to researchers based in the rest of the world. Since 2002, 64 researchers that have been named as citation laureates have won a Nobel Prize.

David Pendlebury, chief citation analyst at Clarivate, says the length of time between a discovery being made and a Nobel Prize being awarded means that we receive a “retrospective view” rather than an up-to-date snapshot of scientific achievement.

“When the Nobel Prizes are announced, I think the public imagines that this is some kind of roundup of the best in contemporary science. And what the Nobel Prize really is, is a time machine,” he explains.

Pendlebury points out that in the Citation Laureates they are seeing more women and scientists from Asia achieving citation rates that put them on a par with people who have won the Nobel Prize. He says: “I think that we will see in the next 10, 20 and 30 years a more even distribution of the Nobel Prize between men and women, and between people from Europe, North America and Asia.” 🌐

*\*Research Professional News is an editorially independent part of Ex Libris, a ProQuest company. In May, it was announced that Clarivate had signed a definitive agreement to acquire ProQuest.*



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## COMMENT | Artificial intelligence



# Booster or treadmill?

As AI tools enter research, it's vital to question what we want from them

**Jennifer Chubb** is a research fellow and **Darren Reed** is a senior lecturer in sociology at the University of York in the UK; and **Peter Cowling** is professor of AI at Queen Mary, University of London, UK

**Research funders worldwide are exploring how artificial intelligence might enable new methods**, processes, management and evaluation. Some, such as the Research Council of Norway, are already using machine learning and AI to make grant management and research processes more efficient.

A review by the UK's public funder UK Research and Innovation, to give another example, suggested that AI might "allow us to do research differently, radically accelerating the discovery process and enabling breakthroughs". The UK's National AI Strategy, published in September, reinforces this approach.

But there are concerns about potential downsides, such as reinforcing biases and degrading working life. AI might turbocharge research, or it might drive a narrow idea of academic productivity and impact defined by bureaucracy and metrics, replacing human creativity and judgement in areas such as peer review and admissions.

To better understand AI's future in academia, we interviewed 25 leading scholars from a range of disciplines, who identified positive and negative consequences for research and researchers, both as individuals and collectively.

So far, AI is used mostly in research to help with narrow problems, such as looking for patterns in data, increasing the speed and scale of analyses, and forming new hypotheses. One interviewee described its labour-saving potential as "taking care of the more tedious aspects of the research process, like maybe the references of a paper or just recommending additional, relevant articles".

Another strong theme was that, by analysing large bodies of texts and drawing links between papers, AI systems can aid interdisciplinary research by matchmaking across disciplines. AI is also seen as a way to boost the impact of multidisciplinary research teams, support open innovation and public engagement, develop links beyond academia and broaden the reach of research through technology. All of these can enhance the civic role of universities.

Some foresaw a revolution in citizen science, enabling projects that reshaped their priorities in response to participants' interests and behaviours. One interviewee noted the possibility of "co-creation between a human author and AI that then creates a new type of story".

The question remains, though, as to whether these efficiency

gains will just feed fiercer competition, forcing researchers to run even faster to stand still—or possibly replace them altogether. AI's labour-saving potential will also come at the cost of privacy, through the gathering of large amounts of personal data.

Our interviewees were fairly confident that AI would not replace established academic labour. The technology was, though, seen as a potential threat to more precarious groups, such as those in the arts and humanities, and early career researchers. Elsewhere in the university workforce, 'white collar' data-based jobs were felt to be more at risk of automation than manual work.

### Transparency is crucial

As technology has a bigger role in funding decisions, our research underlines that it is critical that such applications are introduced transparently and gain the trust of the academic community. Care must be taken not to disadvantage particular groups by reinforcing pre-existing biases.

With AI already having a profound impact on how scientific research is done, there is an acute need for a greater understanding of its effects on researchers and their creativity. We need to balance research quality and researchers' quality of life with demands for

impact, measurement and added bureaucracy. The research policy expert James Wilsdon has drawn parallels between understanding and regulating AI in research and the effort to make sure that metrics and indicators are used responsibly.

Further steps are needed to examine the effects of AI and machine learning. This requires the research policy community to develop and test different approaches to evaluation and funding decisions, such as randomisation and automated decision-making techniques.

Beyond this, studies of the role of AI in research need to go much further, and ask fundamental questions about how the technology might provide new tools that enable scholars to question the values and principles driving institutions and research processes.

The UK's National AI Strategy, for example, emphasises the need to "recognise the power of AI to increase resilience, productivity, growth and innovation across the private and public sectors", but contains little on whether this makes life any better.

We must be willing to ask whether AI in the workplace supports human flourishing and creativity or impedes it. ✱



"We need to balance research quality and researchers' quality of life with demands for impact, measurement and added bureaucracy."



## Comment

## Open science



# The cloud on the ground

Researcher engagement, ensuring usability and avoiding duplication are key to EOSC rollout

**Daniel Spichtinger** is an independent research policy specialist and former member of the European Commission's Directorate-General for Research and Innovation; **Daniel Zdun** is a science policy adviser for the German Council for Scientific Information Infrastructures

According to the European Commission, the European Open Science Cloud aims to provide researchers, innovators, companies and citizens with a federated and open environment to publish, find and reuse data, tools and services for research, innovation and education. First mooted in May 2015, work on building the EOSC has so far mostly focused on governance and technical issues.

This year, though, the project entered its implementation phase. The EOSC has been established as a European partnership, as well as a non-profit association. Its Strategic Research and Innovation Agenda, published in February, aims for a basic version, called the Minimal Viable EOSC, to be operational by 2023.

But are the EOSC and European research community ready for a large-scale rollout? A critical piece of the answer will depend on groundwork by member states.

To gauge national engagement with the project, a forthcoming report from the German Council for Scientific Information Infrastructures investigates how ready France, the Netherlands and Finland are to implement the Minimal Viable EOSC. The report looks at the state of policy and infrastructure, as well as training,

skills, culture and awareness.

The national governments of all three countries are strong supporters of open-science policies. This support, though, takes varying forms: France is more centralised, while the Netherlands and Finland take a more bottom-up approach, albeit one initiated by government agencies. The Netherlands' Open Science Policy is particularly closely intertwined with European developments.

All three countries have laid the foundations for integrating the EOSC into their open science policies, although this process is not yet complete. The lack of integration of universities in France and the almost confusing number of initiatives in the Netherlands can be seen as weaknesses. In the Netherlands in particular, open-science goals are very ambitious, but have not always been achieved.

There are three non-exclusive paths to national integration with the EOSC: participation in EU-funded projects, participation of national staff in the EOSC Interim Board and new EOSC Association, and participation of national organisations in the association. Regarding the quality of national infrastructure, all three countries are well positioned, with Finland placing a particular

emphasis on international cooperation. Specialist national organisations, such as Data Archiving and Networked Services in the Netherlands and the Finnish IT Center for Science, are proving crucial to the concrete implementation on the ground and hooking up national infrastructures.

## Room for improvement

Where all three countries still have work to do is in training, skills, culture and awareness. While efforts at outreach have accelerated in 2021, with each of the three countries having held at least one meeting of a dedicated national EOSC forum involving stakeholders, it is still doubtful whether the bulk of researchers in any of the three has been reached.

This seems to hold true more generally for Europe, with issues related to researcher engagement featuring prominently at June's annual EOSC symposium. It is promising that the EOSC Association has set up a taskforce on researcher engagement and adoption as part of its working group on EOSC implementation.

The user-friendliness of the platform—for example, providing access to systems with a single sign-on—will also play a decisive role in its acceptance in the

broader scientific community of researchers who would benefit from using it in their daily work. The EOSC Association should therefore consider also setting up a separate usability taskforce.

Large-scale cloud-computing projects are all the rage in Brussels. Besides the EOSC, Gaia-X, a data infrastructure aimed mainly at the private sector, was launched in 2019. And last year, the members states gave 'Next Generation Cloud Infrastructure and Services' the status of an Important Project of Common European Interest.

Ensuring that these three initiatives work together without unnecessarily duplicating their activities will require significant effort. Various national initiatives, such as the German National Research Data Infrastructure (NFDI), will also play an important role in connecting different national and European layers.

The need for access to scientific data on a European scale remains strong, and the EOSC has been doing the groundwork in establishing the necessary preconditions in the past years. To successfully roll out EOSC, this work now needs to be matched by a more intensive effort to engage the larger scientific community. ☹



“Are the EOSC and European research community ready for a large-scale rollout? A critical piece of the answer will depend on groundwork by member states.”

## Comment

## Research quality



# Five steps to reproducibility

Making research more reliable requires action at every level of the system

**Phil Ward** is director of the Eastern Arc consortium, a collaboration between the universities of East Anglia, Essex and Kent in the UK

**That there is a crisis in the reproducibility of research is, I believe, beyond doubt.** The scale of it, however, is more difficult to assess: a Nature survey in 2016 found that 70 per cent of respondents had “tried and failed to reproduce another scientist's experiments”, although “73 per cent said that they think that at least half of the papers in their field can be trusted”.

The roots of the crisis are entwined with the modern framework of higher education. According to some estimates, the number of global research outputs is doubling every nine years. Meanwhile, academic careers are increasingly precarious. As a result, there is a strong drive to get research noticed, funded and published.

An important way of doing so is to produce research with eye-catching results that can disrupt accepted paradigms. Such work is more likely to be accepted for publication, chosen for funding, and picked up by mainstream media. Once the results are out there, publishers and funders are less likely to be interested in repudiations of them. It feels like old ground is being retrodden, and the cycle of research has moved on.

But anomalous findings may result from a lack of rigour in the

original research. The authors, for example, might not have managed complex datasets correctly; misidentified, cross-contaminated or over-passaged cell lines; or not had access to specific raw data or methodologies.

Steps are being taken to address both the accidental and instrumental causes of the crisis. The open-access and open-data movements have increased transparency in the research process, and the introduction of data-management plans (DMPs) by funders such as UK Research and Innovation has enabled others to attempt to more fully interrogate findings and reproduce results.

Clearly, though, more needs to be done. Funders, publishers and institutions need to work together to address the underlying issues that have led to this crisis.

The UK parliament's science and technology committee is currently investigating the reproducibility crisis. Responding to the committee's call for evidence, the Eastern Arc collaboration of universities, which I work for, outlined these five essential steps:

**1.** Funders should support replication studies. Some, such as the International Initiative for Impact Evaluation, are already doing so, but normalising

and rewarding such difficult, sometimes stigmatised work would attract more researchers to take it on. Funders could also support this work by developing a database of underused software and hardware that is necessary for the analysis of specific data as part of reproduction studies. Such software and hardware can be expensive to access. Removing this hurdle would enable wider interrogation of the data.

**2.** Funders and publishers should make the reviewing and enforcement of DMPs more robust. Although applicants typically have to complete DMPs, the checks on whether data have been deposited in appropriate repositories are weak. There is also a need to deposit code as well as data—the latter is of limited value without the former.

**3.** Publishers should mandate pre-registration and accept articles for publication based on an outline of research. This would overcome the problem of ‘hark-ing’, or hypothesising after results are known.

**4.** Institutions should work together to produce common policies and monitoring. This should include integrating open and reproducible research practices into their

incentive structures at all career levels, and embedding them into research-ethics frameworks. These should apply to all staff, technicians and data managers.

**5.** Individuals should change how postgraduate students and early career researchers are trained in research methodologies and publication strategies. The Berkeley Initiative for Transparency in the Social Sciences has developed a textbook for training in open science, and other resources exist to support those teaching students about replication. Researchers should incorporate the insights from such publications into postgraduates' training.

Although the onus is on the research community to make these changes, governments have a part to play in improving the scientific literacy of politicians, policymakers and civil servants so that they understand the context and process of research. Without it, there is a tendency to accept results at face value and to act accordingly.

We all need to embrace uncertainty. The pandemic has shown that it is only by understanding data—and their limitations—that we can meet the challenges of an increasingly complex and divided world. ☹



“Individuals should change how postgraduate students and early career researchers are trained in research methodologies and publication strategies.”

NATIONS

France | Germany | Italy | Netherlands

Call to streamline German science policy

Proposed “innovation cabinet” would close knowledge gaps and support public-private projects, supporters say

Hristio Boytchev in Berlin

Leading German science and business organisations have called on the federal and state governments to strengthen the country's science base by creating an “innovation cabinet”. According to the proposal the body should be a powerful part of the government apparatus led by the chancellor's office and would streamline German research policy on overarching issues, including sustainability, digitalisation and health. It should also bring together businesses in the country with the best publicly funded research organisations, said the Research Network, an association of 24 organisations from science and industry. “Research and innovation must be a top priority for the federal government,” the group said. Germany held elections last month and is still in the process of

forming a coalition government—with the social-democratic SPD, the liberal FDP and the Green party the most likely candidates. “We must draw the right conclusions for Germany from the experience of the Covid-19 pandemic,” the Research Network said. “We need to learn quickly, close gaps in the innovation system and secure future value creation.” It added that tackling societal challenges, such as health, sustainability and digitalisation, will only succeed if science and business jointly develop the solutions. This is where the innovation cabinet would step in. In a separate statement, the German Academic Exchange

Service (DAAD), which is part of the Research Network, said there needed to be more emphasis on internationalisation in research policy. “Germany's future viability as an excellent location for science and innovation requires a systematic and comprehensive strengthening of the internationalisation of German universities,” said DAAD president Joybrato Mukherjee. The DAAD advocated a more sustained international exchange of scientists and scholars, arguing that this forms the foundation of most networking and cooperation activities. Sustainable and resilient university networks should also be formed across borders, it said. “Scientists

must be brought together at an early stage in international networks on global topics such as sustainability, climate or health,” the DAAD proposed. German universities should also receive funds for sheltering academics who have to flee repressive systems, the organisation said. In a separate statement, Germany's Alliance of Science Organisations called for a higher prioritisation of international research infrastructures. “The need for complex and costly research infrastructures is becoming essential for more and more fields of science to compete internationally,” the alliance said. ☘

“Research and innovation must be a top priority for the federal government.” Research Network, the representative body for 24 organisations from science and industry

Italy's government gives spending boost to universities

Increase of €500 million takes higher education financing to highest level since 2007

Fabio Turone in Milan

Public spending on Italian universities has increased from €7.9 billion to €8.4bn this year, thanks to a last-minute boost to the country's ordinary fund for higher education. The Italian ministry of universities and research published a decree this month that covers a €500 million increase to the fund. It also outlines how the total

amount of money will be allocated for 2021; for instance, €637m will be spent on student welfare. The much-delayed increase represents the largest top-up to Italian higher education in the past 14 years, and is bigger than the initial higher education budget proposal announced in 2020. The money will be distributed between universities based on a “weighted” system that takes into account the size, performance

and funding history of each higher education institution. However, the share of the funds allocated by performance has grown to 30 per cent of the total amount, based on Italy's latest research-evaluation exercise. The increase in performance-related funding may be met with some resistance. In past years, some Italian universities have complained about this system after seeing a drop in their share

of funding despite continuously excellent performance in evaluations. This is because the weighted system did, at some point, give higher rewards to universities that showed improvement than those that performed consistently well. “Given the large overall increase, no institution received less funding than last year,” said Stefano Geuna, rector of Università di Torino. ☘

Wetsus funding decision delayed again

Uncertainty over Dutch research centre's long-term future continues as management told to wait for next government

Erik te Roller in Haarlem

The Netherlands' Wetsus research centre for sustainable water technology will not be able to count on secure long-term government funding, after a decision on its financing was delayed this month. Economic affairs and climate minister Stef Blok told parliament on 12 October that the country's next government would set annual structural funding for the centre. The Netherlands held national elections in March, but coalition talks have been sluggish and are still not finalised. At Wetsus, PhD students from various universities carry out research projects while their professors supervise them remotely. This enables the centre to host multidisciplinary public-private research programmes in water technology, involving more than 100 companies.

Wetsus in Leeuwarden has been dependent on temporary funding since its establishment in 2003. The end of a grant in late 2020 threatened to put the centre in financial trouble. In anticipation of long-term funding to be provided under the next government, the economic affairs ministry offered €1.9 million a year to Wetsus for 2021 and 2022. This is in addition to €2m in funding from the NWO research council. Earlier this year, an expert group convened by Blok concluded that the centre played an important role in the Netherlands' scientific infrastructure. The group recommended long-term structural funding.

At the end of June, parliament called on the government to recognise Wetsus as a TO2 institution—an umbrella for Dutch institutes of applied sciences and technology. However, the ongoing uncertainty around the centre's future is worrying its leadership. “The state's temporary contribution expires at the end of 2022,” Cees Buisman, scientific director at Wetsus, told Research Europe. “I hope that the lower house will urge minister Blok to make a new transitional arrangement in time, should a decision of new structural funding fail to materialise.” Buisman said that the Dutch

water technology sector, which involves about 1,000 small businesses and several knowledge institutes, had achieved a leading competitive position in the world. In order to preserve this position, he said, the continued existence of Wetsus must be ensured by giving it TO2 status. The centre has asked for €7m a year from the Dutch government and local authorities, including the province of Friesland and the city of Leeuwarden. In addition, Wetsus expects to receive around €3.5m a year from participating companies, €1.5m from the EU and €2m as in-kind contributions from universities. ☘

“I hope the lower house will urge...Blok to make a transitional arrangement in time.” Cees Buisman, scientific director at Wetsus

\* News in brief

Macron launches green funds France's president Emmanuel Macron has launched a funding strategy to make French energy production more sustainable, including €8 billion in support for research into hydrogen and small nuclear reactors. Macron, who made the announcement during a speech on 12 October, said the plan was the result of collective work by a range of people including “students, researchers, academics, trade unions and entrepreneurs”. Full story

Munich, Berlin top funding list Berlin and Munich continue to dominate the German academic research landscape as the cities collecting most research funding from external sources. The Funding Atlas 2021 of the Deutsche Forschungsgemeinschaft (DFG) shows that, for external income, Berlin topped the list with €839 million between 2017 and 2019, while Munich drew €816m and the Lower Neckar region—Heidelberg and Mannheim—was a distant third, with €432m. Full story

Dutch universities pool efforts Four technical universities in the Netherlands have formed a cluster called 4TU. Health to represent their medical research activities. Delft University of Technology, the University of Twente, Eindhoven University of Technology and Wageningen University and Research joined forces to try to obtain more money from health companies and national research funders. This should result in better healthcare and more affordable technologies, the group said. Full story



Nordics

# Survey flags looming IT-expert shortage

Analysis blames lack of university resources for Denmark’s predicted future gap of 20,000 IT specialists

Staffan Dahllöf in Copenhagen

**Denmark is facing a serious shortage of computer scientists** and IT specialists, a study by the Danish engineers’ union IDA and Danish high schools group Danske Gymnasier has found.

The study warned that there was a growing mismatch between demand for skilled computer scientists and programmers, and the education of such professionals in Danish higher education. The union said there was a stark lack of resources at universities to develop information technology degree programmes, which could result in a shortfall of 20,000 IT specialists by 2030.

“We are already facing a deplorable labour shortage and now face a huge challenge with the prospect of further bottlenecks in these areas,” said Thomas Damkjær Petersen, chair of the IDA. “If nothing happens, we risk damaging business growth potential and thus the welfare of the future.”

He added that engineers

and IT specialists had helped Danish companies become leaders in work on climate change and digitalisation, and that it would be foolish to throw away that lead.

The IT education gap is widening despite strong Danish commitments to spend more on climate science and the digital transition—as outlined in the country’s spending plan submitted to the EU’s Recovery and Resilience Facility, the bloc’s Covid-recovery funding scheme.

The IDA analysis also found that Denmark will face a shortage of people with a social science education—especially those who have industry-relevant skills for industry. Birgitte Vedersø, chair of Danske Gymnasier, said employers are already looking for up to 32,000 professionals with a social sciences background.

“We are really good at

educating students who are able to think across subjects and combine, for example, social sciences with science or technology, and find technical solutions that think of the people and institutions that will use them,” she said.

**Funding shortfall**

The IT University of Copenhagen, Denmark’s main educational institution for computing, responded to the survey by pointing out that there was a distinct lack of funding in the field.

Martin Zachariassen, rector of the university, said in reply to the survey that Denmark’s recently revised university funding system would mean that his institution faced further cuts.

“This year, we have had to turn down close to every second applicant due to lack of resources,” he said.

“As a result of the government’s previously launched plan for the field of education, the ITU will have to cut 5 to 10 per cent of the university’s educational places.”

Zachariassen added that there was a misconception at government level that young people were not interested in a technical education or computing subjects, which was not the reality his institution faced.

“Year after year, the number of applicants for our IT education increases,” he said. “This education is popular among young applicants for the same reason that our graduates are popular among employers.”

He said that, if Denmark wanted to remain a “digital pioneer”, it urgently needed to invest more in academic training and IT research. “[The current approach] does not correspond to the needs of the labour market.”

“If nothing happens, we risk damaging business growth potential.”

IDA chair **Thomas Damkjær Petersen**

\* News in brief

**Unions oppose immigration law**

Five unions and two student associations at Swedish universities and colleges have joined a protest against a government law on the immigration of researchers. Doctoral students and postdocs wishing to remain in Sweden now need to document at least 18 months of continuous employment—despite most postdoctoral contracts lasting for one year. The unions and student associations demanded an immediate revision of the law.

More Nordic news online

**Copenhagen cuts ‘too early’**

A plan to cut 1,600 student places at Copenhagen University as part of an agreement in the Danish parliament has upset academics and politicians—including the agreement’s supporters. Enhedslisten, the party behind the agreement, said the goal had been to decentralise higher education, but that the cuts were premature. The agreement was not meant to be fully implemented until 2030, according to news website Forskerforum.

More Nordic news online

**PhDs’ academic exodus**

Close to 50 per cent of academics with doctorates in Norway leave academia within a year of obtaining their PhD, a study has shown. This figure has been stable for the past 10 years, according to an ongoing monitoring exercise by NIFU, the Nordic Institute for Studies in Innovation, Research and Education. The PhD monitor also shows a clear decline in the availability of postdoctoral opportunities in academia.

More Nordic news online

UK & Ireland

# UK climate R&D policy ‘lacks ambition’

Researchers issue warning over funding and cuts ahead of COP26 meeting

Robin Bisson

**Policy experts have warned that the UK is failing to back rhetoric on climate change** with actions on R&D, adding to broader concerns that the nation’s hosting of the COP26 summit will largely lead to hot air.

Ahead of the gathering of global leaders in Glasgow on 31 October, several experts told Research Europe that the government’s actions on climate research were lacking ambition, and that cuts to research on climate adaptation funded by the UK’s aid budget contradicted the summit’s stated aim of limiting the damage from global emissions.

“I don’t think there are enough R&D resources that are going to climate action specifically,” said Yacob Mulugetta, professor of energy and development policy at University College London (UCL). “The level of ambition could be much higher.”

Prime minister Boris Johnson said last month that it was “time for us to listen to the warnings of the scientists” on climate

change. But Lisa Schipper, a climate-adaptation expert at the University of Oxford, said that cuts imposed on research projects funded by the UK’s aid budget this year—including some specifically related to climate change—were “a contradiction”, especially since one of the mottos of COP26 is the ‘race to resilience’.

“You can’t cut funding for development and research funding in developing countries, and then also claim that you’re trying to build resilience around the world,” Schipper said. “It makes it look like it’s just rhetoric.”

There are also concerns that climate research is being held up by issues with wider research spending plans. While the UK government has promised to raise overall public R&D spending to £22 billion (€26bn) per year by 2024-25, the sector is concerned that the timeframe is slipping, and

the UK’s membership of the EU’s Horizon Europe R&D programme is currently delayed due to political disputes with the EU.

“If [UK participation in] the Horizon programme doesn’t continue, we’re in for real problems,” said Joanna Haigh, who was co-director of the Grantham Institute for climate change and the environment at Imperial College London until 2019. She noted that collaborations with European researchers have been crucial to the delivery of results in climate science.

Meanwhile, the government’s recently published Net Zero Strategy, which promises £1.5bn for innovation, has been criticised for being too modest. Jim Watson, professor of energy policy at UCL, said it “isn’t enough” and “will need to be followed up by a ratcheting-up of ambitions”.

A spokesperson for the

Department for Business, Energy and Industrial Strategy said: “These criticisms simply don’t stand up to scrutiny given that...we published our Net Zero Strategy, which includes an extra £500 million towards innovation projects on transport, land use and waste, to develop the green technologies of the future, in addition to the BEIS-led £1bn Net Zero Innovation Portfolio.”

But there is some sympathy for the UK government’s position going into COP26 following the pandemic. Cameron Hepburn, director of the Smith School of Enterprise and the Environment at the University of Oxford, said: “The UK government has been right to refocus international efforts...on achieving specific cost reductions in clean technologies.”

He added that “the UK science base on climate solutions has been, and remains, very strong”.

“I don’t think there are enough R&D resources that are going to climate action.”

**Yacob Mulugetta**, professor of energy and development policy, University College London

\* News in brief

**Ireland hikes R&D spending**

Ireland’s higher education and research institutions will receive €3.7 billion next year, up from €3.3bn in 2021, according to the government’s latest budget. Another €253.5m has been allocated to Science Foundation Ireland’s challenge-based funding scheme, the Irish Research Council, and for work at the Tyndall National Institute in developing Ireland’s ICT expertise. The budget drew mixed reactions from Ireland’s universities.

Full story

**Ireland sees student boost**

The number of students entering higher education in Ireland has increased by almost 17.5 per cent over the past six years, according to statistics from the Irish Higher Education Authority. Around 245,600 enrolments took place in the 2020-21 academic year, a 4.2 per cent increase since 2019-20. But Covid-19 brought about an 11.6 per cent decline in international student enrolments from 2019-20 levels, the authority said.

More Ireland news online

**Wellcome gets climate director**

The Wellcome Trust biomedical research funder has appointed nutrition expert Alan Dangour as its first director of climate and health. Dangour, who works on the impact of climate change on food systems, will lead the charity’s work by supporting research into the impact on health of climate change, as well as possible solutions. Wellcome announced on 19 October. He will take up the post in mid-January 2022.

Full story

US

# NSF ‘overwhelmed’ by foreign-tie claims

Funder’s office of investigations sees surge in referrals from FBI about allegations of undisclosed links to countries

Robin Bisson

The inspector general of the United States’ largest non-medical government research funder

has said her office has been “overwhelmed” by allegations about researchers who have apparently failed to disclose links to foreign countries.

At a Congressional committee hearing earlier this month, Allison Lerner said such cases currently make up about 63 per cent of her watchdog office’s caseload of investigations at the National Science Foundation (NSF).

“The growth of allegations related to undisclosed foreign affiliations has overwhelmed my office’s small investigative staff,” Lerner told lawmakers. She said that even if her 20-strong investigative team doubled in size, “we would still be hard pressed to keep up with the number of allegations that are coming in”.

Foreign interference in government-funded research in the US has become a hot political topic in recent years, particularly in relation to

researchers linked to expanding Chinese talent recruitment programmes, against the backdrop of increased tensions with the Asian superpower.

The NSF expects all researchers applying for grants to declare links to any foreign talent programmes, including income from overseas appointments. Failure to do so may result in funding being clawed back from those who win it.

According to written evidence provided by Lerner, the NSF has recovered \$7.9 million (€6.8m) in action taken against grantholders linked to foreign talent programmes on the recommendation of the inspector general’s office. The funder has suspended about 24 grants and terminated around 16 awards involving 23 researchers and 21 organisations.

Lerner told the committee that

prior to 2017, her office had seen no cases involving undisclosed foreign ties, but in recent years there had been “a huge growth in a very short period of time” in referrals from the Federal Bureau of Investigation. She also confirmed a suggestion from one of the committee that there had been a “1,000 per cent” rise in FBI referrals.

Legislation making its way through Congress that would allow the NSF’s budget to increase from \$8.5 billion in 2020 to more than \$21bn in 2026 raised concerns from committee members over the potential for an even greater number of cases to occur. Lerner said she was pleased that the draft legislation included an extra \$50 million for the office of the inspector general.

Universities have also been feeling the pressure over increased reporting requirements

for relationships with foreign countries.

Speaking at the committee hearing, Massachusetts Institute of Technology’s Maria Zuber, the co-chair of a research security panel at the National Academies of Sciences, Engineering, and Medicine, said there had been “a fair amount of confusion about what actually needs to be [disclosed] and how it needs to be disclosed”.

She said that differences between what agencies required in terms of disclosure had led to “inadvertent errors” from some researchers who deserved to be treated differently from those who had an intent to deceive.

Eric Lander, US president Joe Biden’s top science adviser, has previously said there should not be “a thicket of rules that everybody has to interpret in different ways”. 🗳

“[The rise in allegations] has overwhelmed my office’s small investigative staff.”

Allison Lerner, inspector general for the National Science Foundation

\* News in brief

Spending hike faces rough ride

Proposals to boost funding across health and other research this year face a rough ride from Republicans, after Democrats in the Senate Appropriations Committee released 2022 spending plans for health, space, science and other areas on 18 October. The Democrats have a small Senate majority, and Republicans said they would oppose the plans, citing budget overspend and a failure to “give equal consideration to the defence sector”.

Full story

Diversity push totals \$2 billion

The Howard Hughes Medical Institute has launched a fund worth \$2 billion (€1.7bn) to promote racial, ethnic and gender diversity in science over a 10-year period. The fund will be available across all levels of science—from college and undergraduate to research leadership and administration—through a range of support schemes, including peer mentorship, professional development and community-building programmes, the institute said.

More US news online

High-risk grants awarded

The National Institutes of Health has awarded 106 grants to support high-risk, high-reward research that would otherwise struggle to pass traditional peer review. Projects awarded funding through the scheme this year touch on subjects including health disparities in drug development and social determinants of suicide. A total of \$329 million (€282m) will be awarded to the 106 projects over a five-year period.

More US news online

World

# Solution to ‘helicopter science’ proposed

Researchers argue that self-reflection in manuscript submissions could halt exploitation of low-income settings

Linda Nordling in Cape Town

A group of researchers and journal editors has proposed measures to help journals stamp out the much-maligned practice of ‘helicopter science’.

Writing in the journal Anaesthesia, the authors, who hail from Kenya, Malawi, Nigeria, South Africa, Tanzania and the UK, argue for “reflexivity statements” to root out the exploitation of low- and middle-income country researchers and settings.

The statements, which would describe how equity has been promoted in the study, should be published alongside the paper, they argue. Statements should be required for manuscripts based on research conducted in lower-income countries by partnerships that include researchers from high-income countries.

The idea was spurred by the growing interest in helicopter science, also known as parachute research, over the past three years, says Sèye Abimbólá, one of the authors. He is a Nigerian public health expert based in

Australia, and editor-in-chief at the journal BMJ Global Health.

“Hardly a month goes by without a new paper quantifying the persistence of parachute research in various health and medical research fields,” he told Research Professional News. This happens because scientists from well-resourced settings travel to poorer countries to do research on local peoples or settings without involving local scientists or benefiting local communities.

However, even when journals require papers to include local authors, that might still not be enough to combat the scourge, Abimbólá explains. Local authors “are often not listed in any of the positions that indicate leadership or ownership of the work”, such as first, last or corresponding author.

Meanwhile, he adds, there is a limit to how much an editor or

reviewer can glean from a list of authors about the dynamics of a collaboration. “So we thought: why not ask authors to describe what went on in the partnership?”

Abimbólá and his co-authors suggest that editors and reviewers should refer to the reflexivity statement when assessing whether submissions are suitable for publication.

They also want journals to ditch arbitrary restrictions on authorship numbers, as this disadvantages underrepresented groups such as early career researchers and women.

In addition, they want research conducted in low- and middle-income countries to be made freely available, to promote access and impact.

Abimbólá and his co-authors supply their own reflexivity statement alongside their commentary. It highlights how

the author group was selected, and why most of the authors are based in higher-income countries while still representing a wide diversity of cultural backgrounds from low- and middle-income countries.

“We are ourselves implicated in the institutions that perpetuate inequities through parachute research, and are therefore committed to addressing the problem,” it notes.

Abimbólá says that the point of such statements is to help researchers think about representation and inclusion from the get-go of research partnerships.

“Our hope is that by having to complete such a statement, authors will preemptively consider these issues, and put in place equitable processes at the outset of any research collaboration,” he says. 🗳

“Why not ask authors to describe what went on in the partnership?”

Sèye Abimbólá, editor-in-chief of BMJ Global Health

\* News in brief

‘Trolled and threatened’

Australian scientists have suffered high levels of abuse and threats for speaking out on Covid-19 and other science issues. The Australian Science Media Centre surveyed 50 scientists who had shared their knowledge in the media, with 31 reporting some level of “trolling”. This included attacks on their credibility and reputation, and psychological abuse. Death threats were reported by 12 per cent of respondents.

Full story

Pathogen advisers appointed

The World Health Organization has appointed 26 researchers to be its advisers on pathogens that could cause the next pandemic. Announcing the membership of its Scientific Advisory Group for the Origins of Novel Pathogens on 13 October, the WHO said the group would help develop a global framework to steer research on both new and re-emerging problems with “epidemic and pandemic potential”.

Full story

New Zealand’s R&D issues

A “report card” on New Zealand’s R&D system has shown that it is yet to reach its national goals. The report card, from the Ministry of Business, Innovation and Employment, was released on 26 October. Research minister Megan Woods said she would not “sugarcoat” the country’s failings, adding that areas that could be improved include “supporting...a more diverse workforce and ensuring the system [can] more quickly adapt to changing priorities”.

Full story



# FUNDING INSIGHT

## Funding at a glance

News from Research Professional's funding team

### Venture capital

A European Commission-backed venture capital fund has said it will be making €1.7 billion in investment available for life sciences in Europe. The Venture Centre of Excellence fund was launched in 2020 with €150 million from the Commission, and has since brought on venture capital funds and businesses to boost its bankroll. In a statement earlier this month Jean-Marc Bourez, managing director of EIT Health France, one of the fund's backers, said it was now “fully operational”.

### Over the Horizon

Researchers seeking funds from the EU's Horizon Europe programme for food and environment projects have requested over three times the funding available from early calls. On 13 October the European Commission said it had received 591 proposals submitted for seven 2021 calls on food, bioeconomy, natural resources, agriculture and environment. Researchers from all 27 EU countries and 74 other nations requested €3.38 billion in total. The calls have an actual budget of €959 million.

### New Bauhaus

The European Institute of Innovation and Technology, an EU innovation funder that is part of the bloc's Horizon Europe programme, is offering 20 companies up to €50,000 each for work bringing together sustainability with aesthetics. The money is being provided under the auspices of the European Commission's “creative and interdisciplinary initiative”, which

it has dubbed the ‘New Bauhaus’. This funding is part of a €5 million programme of New Bauhaus work under the EIT in 2021-2022.

### €700m digital calls

Over €700 million in funding for green growth and digitisation have opened via the Horizon Europe programme. The European Commission said on 12 October that 13 topics on “climate-neutral, circular and digitised production” with a budget of €335m were now open. Another 22 topics on digitised industry have been opened with a budget of €402m.

### Medical robots

The European Investment Bank has lent €15 million to a French company hoping to launch a medical robot. The funding for Quantum Surgical's liver cancer treatment robot is part of the €25 billion European Guarantee Fund.

### EMBO

Researchers in nine countries are set to benefit from an initiative by the European Molecular Biology Organization to increase the geographical spread of participants in the funder's programmes. Fifteen per cent of all long-term fellowships—which made up around two-thirds of the funder's annual budget between 2015 and 2019—went to researchers in Germany, where Embo is headquartered. In comparison, just 14 per cent of fellowships went to the nine countries with which Embo is pushing for greater participation: Croatia, Czech Republic, Estonia, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Turkey.

## Opportunities in numbers

36%

The percentage of computer science and informatics opportunities on the Research Professional database open to researchers in Europe.

€10.5 million

The highest confirmed grant for work on research ethics in the database that is open to researchers in Europe.

>1,420

The number of opportunities on the database open to researchers in Europe with a closing date in November 2021.

## Top Fops: Picks of the week

Funding opportunities hand-picked by our expert funding team. See more on [www.researchprofessional.com](http://www.researchprofessional.com)

### Resilient and accessible EU health systems

EU4Health, part of the European Commission, is inviting applications for its call supporting actions to build resilient and accessible health systems in the EU, with grants worth up to €7 million each. **Deadline: 25 January 2022**

[See this opportunity online](#)

### Cern fellowships

Cern is enabling researchers in applied sciences, computing or engineering to work in a research group at the nuclear facility, with a stipend worth up to 8,178 Swiss francs (€7,600) per month for up to three years. **Deadline: 1 March 2022**

[See this opportunity online](#)

## Insight

## Development research



# French touch

The lowdown on an international funder with lofty ambitions

Robin Bisson

In December last year, French president Emmanuel Macron announced a new funding mechanism to support innovation through France's foreign aid budget. The Fund for Innovation in Development (FID) offers five levels of funding through an open call, covering the entire innovation process, and aimed squarely at fighting poverty and inequality.

Grants start at €50,000 for early stage ideas, rising to €4 million to scale up innovations that have been rigorously tested.

FID is open to applications from around the world, as long as they focus on innovations for low- and middle-income countries, with an emphasis on those that are priorities for French development assistance, which are largely in sub-Saharan Africa.

Applications from research institutes, universities, governments, public agencies, NGOs and private companies are all accepted. Projects can be proposed in any sector, but the French government's four key areas for aid spending are education, health, climate change and gender equality.

### How is FID different to other development innovation funding programmes?

Juliette Seban, executive director of FID, relates how things have shaped up during the first few months of the scheme.

### What is FID, in a nutshell?

It's a key initiative of the French government to modernise

French foreign aid. The team started in March. We are hosted by the French Development Agency, but independent in terms of governance and attribution of funding. We have a budget of €15m per year for an initial period of three years.

### How are the applications processed and assessed?

We have a call that opened mid-March, to which people can apply any time, and we evaluate applications on a rolling basis.

The FID team do a first filter and the best applications go to a second round, and we discuss them with some researchers or experts in the field. This lasts one to two months and then the project goes to a review committee that is composed of three external people who will give their opinion on the project, and then we decide based on this.

FID assesses every application against three core criteria: rigorous evidence of impact on improving the lives of people living in poverty, cost-effectiveness of the innovation, and potential for scale.

In all innovation funds you have phases: pilot, test and scale-up. What FID adds is two things. One is that we add preparation grants, which are very small grants of up to €50,000—we're

trying to help new actors apply who need a small amount for a feasibility study or a market assessment. The other is what we call ‘transforming public policy grants’, which is more for governments when they scale up an innovation and need technical assistance, or if they want to institutionalise an innovation lab.

### What kind of applications have you received so far?

They have mostly been early stage. I think almost 70 per cent are for the preparation grants and pilots, so the two first stages. There's a great need for such small amounts. At the moment we receive around 100 applications a month.

### Do you prefer to have members of the project teams from low- and middle-income countries?

It's not framed this way for now. What we say is that we encourage consortia of partners with expertise that is convincing in terms of how the project is going to work. So local expertise, sectoral expertise, research in the countries which the project is focused on is an advantage in terms of application, but it's not mandatory.

### Is there anything that applicants have found difficult?

One criterion that we feel is hard for a lot of organisations to understand is what we expect in terms of evidence of impact.

Another is cost-effectiveness, which is linked to impact—it's looking at the cost of your intervention and its impact, and being able to say the development innovation has more impact per euro than the alternative. It's thinking about cost, not in terms of whether it's profitable or not profitable, but the link between cost and impact.

### What kind of questions do applicants ask?

A question we get a lot is what we mean by ‘innovation’. It's a broad definition: it can be in terms of process, cost, reaching more people at the same time. So it's not only technological—it can be delivering something faster or in a less costly way, or a new way of delivering medicines somewhere, or new ways of teaching.

### What is your top application tip?

Convince us that the innovation will give an improvement related to poverty and inequality in the sector that you tackle.

What we see a lot of in applications is when people say, “there is a challenge of education in country X”, for instance, and then they present their programme and you don't see the link. What's the theory of change? What are the mechanisms that will make this innovation make a difference? Explain it to us.

Maybe it's implicit for you—make it explicit for us on how it will actually change things. ☛



### \* Search global funding opportunities online

Research Professional's funding database is updated daily with the latest opportunities in all disciplines. Search the latest data.

# Funding opportunities: Highlights

An overview of funding opportunities published in Europe and around the world

## Europe

Scholars can apply for the **British Library's** endangered archives programme, which supports projects that locate vulnerable collections and arrange their transfer to a suitable archival home, with grants worth up to £150,000 (€178,000) each.

Female PhD students or postdoctoral researchers working in science may participate in a one-year training and support programme hosted by **Bayer** in Berlin and online. Twenty spots are available.

The **Leonardo Company** is holding the Telespazio technology contest, supporting projects and ideas related to space technology, with prizes worth up to €10,000.

See Europe highlights online

## Nordic

The **Nordic Research Council for Criminology** is inviting projects related to Nordic criminology, with grants worth up to 2 million Norwegian kroner (€206,000).

Researchers can now apply for three different grants in the area of endocrinology and metabolism from the **Novo Nordisk Foundation**, with grants worth up to 10 million Danish kroner (€1.3m).

The **Nordic Council of Ministers**, through its Labour Market Committee, is inviting proposals on Nordic cooperation on employment policy, with grants worth up to 950,000 Danish kroner for up to three years.

See Nordic highlights online

## North America

The **Zonta International** foundation is accepting applications for its Amelia Earhart Fellowship, which assists women in pursuing degrees in aerospace engineering or space sciences. Up to 35 fellowships are available worth \$10,000 (€8,600) each.

PhD researchers and early career scholars can now apply for funding from the **Russell Sage Foundation's** race, ethnicity and immigration programme, with grants worth up to \$175,000 for up to two years

Five calls are open from the **American Foundation for Suicide Prevention**, with grants worth up to \$133,000 for up to two years supporting research on suicide.

See North America highlights online

## Rest of World

The **Prince Sultan Bin Abdulaziz International Prize for Water** is now accepting nominations for its creativity prize, worth \$266,000 (€229,000). It recognises work considered a breakthrough in any water-related field.

Scholars are invited to apply to **Icetex's** postgraduate scholarships, supporting specialisation, master's and PhD studies in Colombia. Up to 50 scholarships are available lasting one to two years.

Individual researchers and research teams can apply for army history grants from the **Australian Army**, worth A\$15,000 (€9,600) per year for one to three years.

See RoW highlights online



### \* Search for funding opportunities online at [www.researchprofessional.com](http://www.researchprofessional.com)

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AN IMPORTANT MESSAGE FROM PROFESSOR NICK LEMOINE MD PHD FMEDSCI, CHAIR OF THE MEDICAL RESEARCH FOUNDATION

# Gifts in Wills could be the key to protecting the future of human health

Our experience of COVID-19 shows how suddenly a global health challenge can appear. As a member of our scientific community, you will understand that while nobody can predict what we will face next, we can be certain that the future will bring many more threats to human health.

As Chair of the Medical Research Foundation – the charitable arm of the Medical Research Council – I have seen the incredible impact that individuals who remember the Foundation in their Wills can have on the future of our health and wellbeing here in the UK. These gifts fund research and researchers which can have far-reaching implications for human health.

**With a gift in your Will you can play a key role in providing the science that will protect the health of future generations.**

Right now, the Foundation is funding research to tackle antimicrobial resistance, and investing

in researchers like Dr Myrsini Kaforou – who will make the fight against antimicrobial resistance her life's work.

Without support at the crucial early stages, researchers like Dr Kaforou can be forced to abandon their passion and leave science altogether, with an immeasurable loss to future human health.

**“As scientists, our duty is to secure the future of research for the generations that follow.”**

Professor Fiona Watt, President of the Medical Research Foundation and Executive Chair of the Medical Research Council.

Gifts in Wills provide the long term funding and security that allows the Foundation to invest in projects like Dr Kaforou's and lay the foundations for quality research in years to come.

**Your Will can fund the rational response to health challenges that medical science provides.**



“The funding I received through the Medical Research Foundation will be transformative for my research.” Dr Myrsini Kaforou

While we don't know what the future holds for human health in the UK, we do know that research, and the brilliant scientists driving that research forward, are the key to meeting those challenges for years to come.

But many of these scientists rely on the generosity and foresight of fellow members of the scientific community who understand the power of science and are willing to leave a gift to medical research in their Wills. At the Medical Research Foundation, over 90% of our voluntary income comes from individuals who choose to include a gift in their Will – they are crucial in the Foundation's ability to fund research

that will enable the next generation of scientists to make real world discoveries in the future.

**I firmly believe that a gift in your Will to the Medical Research Foundation is an excellent investment and will have a lasting impact on science and on the future of human health in the UK.**

*Nick Lemoine*

**Professor Nick Lemoine MD PhD FMedSci**  
Chair of the Medical Research Foundation

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# INSIDE OUT

## On the front line

In our previous issue, this column reported on how the EU's research and innovation commissioner, Mariya Gabriel, made a trip to Switzerland amid tensions over the country being frozen out of talks to associate to the bloc's R&D programme, Horizon Europe. We speculated as to whether some Swiss research leaders may have taken the opportunity to whisper in her ear about the importance of association to R&D ties between the two.

Since then, Gabriel has once again found herself on the front line of the EU's tensions with individual countries—this time wayward member state Poland. On 25 October, she tweeted that she was “in Warsaw for meetings dedicated to research and innovation [and] education”, among other things, including meeting with the deputy prime minister Piotr Gliński, as well as education and science secretary Wojciech Murdzek.

Her trip came just days after national leaders in the Council of the EU met for discussions on topics that included concerns about the rule of law in the bloc—an issue over which Poland has found itself at odds with most other member states over the independence of its judiciary and whether Polish or EU law has primacy (see P4).

Whether Gabriel was drawn into discussing such matters on her visit is unclear at present. Science diplomacy certainly has its place in the larger diplomatic toolbox, but there are dangers to tying research and innovation into broader concerns, as Switzerland has discovered to its cost.

Meanwhile, the Parliament's Committee on Culture and Education felt the need to

publish correspondence between itself and Poland's minister of science and education, Przemysław Czarnek, over concerns about the rule of law, as well as “instrumentalisation of history for political purposes” in education.

Back in June, the committee's chair, Sabine Verheyen, wrote to Czarnek regarding comments he made on Polish radio the month before. She told him she wanted to “repudiate your misrepresentation of the EU and the unspecific and unfounded allegations of its being an ‘unlawful’ body”, and asked him to clarify “what exactly you envisage when you speak of replacing the current ‘education of shame’ with an ‘education of pride’” in Polish schools. According to the committee, Czarnek “fell short” of providing answers in a reply, and “rather provided an extensive outline of the Polish view on the Second World War and the hardships faced by the Polish people in particular, which the...committee had never disputed nor belittled in any way”.

## Tricky business

This month the Commission unveiled its latest attempt to tackle climate change—a video featuring “famous footballers performing tricks to save energy and cut emissions”. Frans Timmermans, the Commission's executive vice-president for the European Green Deal, said the video showed how everyone could help the fight against global warming with “small, individual steps like...turning off a couple of lights as we glue our eyes to the match on TV”. No mention was made of how many football teams fly between games, or that oil and gas companies are major sponsors of some of Europe's biggest clubs.

## \* Diary dates

### Online

3 November

The European University Association will host a webinar on EU-US academic cooperation, as part of a series on international relations and how geopolitical changes are affecting universities.

#### Event details

### Zürich

4 November

The Academic Cooperation Association is among the organisers of a conference that promises to explore innovation through internationalisation, focused on mobility and other forms of international activity.

#### Event details

### Ljubljana

8 November

The Slovenian presidency of the Council of the EU is hosting an event on “resetting education and training for the digital age”.

#### Event details

### Brussels

10 November

The European University Association will present the findings of its survey on university innovation, and host a discussion with EU R&D commissioner Mariya Gabriel on its recommendations.

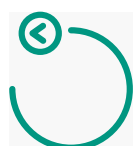
#### Event details

### Online

15-16 November

A virtual conference from the Slovenian presidency of the Council of the EU will consider the mobility of Marie Skłodowska-Curie Actions fellows.

#### Event details



## Research rewind

### 2011: Science Europe plans to make itself heard

Ten years ago, the association of research funders and performers, Science Europe, was launched as a successor to Eurohorcs, representing the heads of European research councils.

The launch paved the way for a gradual incorporation into Science Europe of some of the activities of the European

Science Foundation, which was expected to be wound up but adapted its focus and still continues today in a much-changed form.

Paul Boyle, who was elected president of Science Europe, said the association would “work closely with the European Commission to influence how money is

spent”. Peter Tindemans, the then head of science policy at the researchers organisation Euroscience, said the launch would help national funding agencies to be heard in Brussels. \*

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